

Claims

- [c1] 1. A probe sheet comprising: a sheet member with a flexibility; and plural measurement probes provided on one surface of the sheet member, wherein each of the probes has a shape capable of elastic deformation in a direction, upward or downward.
- [c2] 2. A probe sheet according to claim 1, wherein wiring patterns are formed inside and/or on a surface of the sheet member and an external electrode connected electrically to the probes through the wiring patterns is provided on the surface of the sheet member.
- [c3] 3. A probe sheet according to claim 2, wherein circuit elements are provided inside and/or on a surface of the sheet member and the circuit elements are connected electrically to the wiring patterns.
- [c4] 4. A probe sheet according to claim 1, wherein each of the probes is curved and supported at one end thereof and a reinforcing member with an elasticity higher than a probe is provided integrally with the probe on a surface thereof facing the sheet member along the length direction.

- [c5] 5. A probe sheet according to claim 1, wherein each of the probes is curved and there is a predetermined clearance between a surface of a probe on the opposite side from the top of the probe at which the probe is brought into contact with an electrode of a measurement objective and the sheet member, and an reinforcement member with an elasticity higher than the probe is inserted in the clearance.
- [c6] 6. A probe sheet according to claim 1, wherein the sheet member is made of a material with a linear expansion coefficient in the range of from 2.5 to 10.5 ppm/°C.
- [c7] 7. A probe sheet unit which is a sensing section of a semiconductor wafer measuring instrument, comprising:
 - a base plate mounted to a prober of the instrument;
 - a probe sheet according to any of claims 1 to 6 mounted to a lower surface of the base plate; and
 - an elastic member interposed between the base plate and the probe sheet.